No.6:

#include <iostream>

using namespace std;

int main()

{

int x = 0;

cout << "Enter a number: " << endl;

cin >> x;

int num = x;

int sum = 0;

int i = 1;

while (i < x) {

if (x%i == 0){

sum = sum + i;

}

i = i + 1;

}

if( sum == num ){

cout <<"Perfect number"<< endl;

}

else{

cout <<"Not Perfect"<< endl;

}

return 0;

}

No.7:

#include <iostream>

#include <cmath>

using namespace std;

int main()

{

int x = 0;

cout << "Enter a number: " << endl;

cin >> x;

int num = x;

int sum = 0;

while ( x != 0) {

sum = sum + pow(x % 10, 3);

x = x / 10;

}

if (sum == num) {

cout << "Armstrong number" << endl;

}

else {

cout << "Not Armstrong number" << endl;

}

return 0;

}

No.9:

#include <iostream>

#include <cmath>

using namespace std;

int main()

{

int x = 0;

cout << "Enter a number: " << endl;

cin >> x;

int num = x;

int reversedNum = 0;

while ( x != 0) {

reversedNum = reversedNum\*10 + x % 10;

x = x / 10;

}

if (reversedNum == num) {

cout << "Symmetric Number" << endl;

}

else {

cout << "Not Symmetric Number" << endl;

}

return 0;

}